

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-6. Cancelled.

7. (Currently Amended) An object detection system comprising:
a radar detection unit (2) that detects an object using a radar;
an image detection unit (3) that detects an object using an image; and
a collating unit (4) that performs collation between a detection result of the radar detection unit (2) and a detection result of the image detection unit (3), wherein;
the collating unit (4) detects a combination of an object detected by the radar detection unit (2) and an object selected among those detected by the image detection unit (3), which is the closest to the object detected by the radar detection unit (2), detects a combination of an object detected by the image detection unit (3) and an object selected among those detected by the radar detection unit (2), which is the closest to the object detected by the image detection unit (3), determines whether there is a coincidence between the combination of the object detected by the radar detection unit (2) and the selected object as being closest thereto and the combination of the object detected by the image detection unit (3) and the selected object as being closest thereto, and determines, when there is the coincidence, that the object detected by the radar detection unit (2) is the same as the object detected by the image detection unit (3).

8. (Currently Amended) The object detection system according to claim 7, wherein the radar detection unit (2) comprises at least one of a millimeter-wave radar and a laser radar.

9. (Currently Amended) The object detection system according to claim 7 or 8, wherein the image detection unit (3) comprises a stereo camera.

10. (Currently Amended) A method of detecting an object in a system (1) including a radar detection unit (2) that detects an object using a radar, an image detection unit (3) that detects an object using an image, and a collating unit (4) that performs collation between a detection result of the radar detection unit (2) and a detection result of the image detection unit (3),

the method comprising the steps of;

detecting a combination of an object detected by the radar detection unit (2) and an object selected among those detected by the image detection unit (3), which is the closest to the object detected by the radar detection unit (S1, S2),

detecting a combination of an object detected by the image detection unit (3) and an object selected among those detected by the radar detection unit (2), which is the closest to the object detected by the image detection unit (S3, S4),

determining whether there is a coincidence between the combination of the object detected by the radar detection unit (2) and the selected object as being closest thereto and the combination of the object detected by the image detection unit (3) and the selected object as being closest thereto, and;

determining, when there is the coincidence, that the object detected by the radar detection unit (2) is the same as the object detected by the image detection unit (S5).

11. (Currently Amended) The method according to claim 10, wherein the radar detection unit (2) comprises at least one of a millimeter-wave radar and a laser radar.

12. (Currently Amended) The method according to claim 10 or 11, wherein the image detection unit (3) comprises a stereo camera.